



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,169	09/18/2003	Alan K. Snell	1032.005	6319
36790	7590	09/19/2005		
TILLMAN IVSAN, PLLC PO BOX 471581 CHARLOTTE, NC 28247			EXAMINER GIBSON, KESHIA L	
			ART UNIT	PAPER NUMBER
			3761	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/665,169

Applicant(s)

SNELL, ALAN K.

Examiner

Keshia Gibson

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 42-44, 47, 50-53, 55-64, 67, 70 and 73-78 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/28, 6/30, 7/21, + 7/29/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 42, 50, 52, 55, 58, 60-64, 73, and 77 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Narawa (JP 10-95481).

In regard to Claims 42, 58, and 77, Narawa et al. disclose an unused diaper 2 that is hermetically sealed (i.e., has an airtight seal) within an air impermeable encasement 3 after being vacuumed) (analogous to air being removed from the encasement (abstract, means for solving the problem, effect of the invention, examples). Because Narawa et al. disclose removing air from the encasement, and then closing the encasement with an airtight seal, this inherently created a partial vacuum. The diaper is compressed ([0010]). Because Narawa disclose reducing the thickness of the diaper, the volume is inherently reduced [0015]. Narawa et al. further disclose that the encasement 3 encloses only one diaper and has a substantially rectangular shape (Drawings 1, 4, 8-10; title; abstract, [0014]).

In regard to Claims 50, 60-64, and 73, Narawa et al. disclose that the diaper 2 is folded (Drawings 1-8). The diaper 2 may be folded at least twice in a lengthwise direction (Drawings; [0027]-[0029]). One configuration comprises folds in both the length and width direction that are half of the "nominal" configuration (Fig. 7-8). A length of the

Art Unit: 3761

diaper (in this case the "width") can be "foldedly reduced" to one-third or one-fourth of the "nominal configuration" (Fig. 6). Also see discussion for Claim 42.

In regard to Claim 52, the encasement 3 comprises a notch 36 to facilitate opening of the encasement 3 (Drawing 1; Embodiment of the Invention- [0020]-[0021]).

In regard to Claim 55, the material for the encasement is bendable; therefore it is flexible (Embodiment of the Invention- [0014]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 43-44, 47, 51, 53, 59, 67, 70, 74-75, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narawa et al.

In regard to Claims 43-44, 47, 67, and 70, as discussed previously, Narawa et al. disclose vacuum sealing an encasement comprising a diaper in order to make it more compact for transport and storage (abstracts), but do not expressly disclose that a specific pressure being created within the interior of the encasement. The pressure within the encasement affects the overall size of the encasement and is therefore considered to be a result effective variable. Thus, it would have been obvious to one of ordinary skill in the art to provide a specific pressure within the interior of the encasement, including one that is "on the order magnitude of a millibar," and further,

Art Unit: 3761

being between 5 millibars and about 1 millibar, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In regard to Claims 51, 53, 59, 74 and 78, Narawa et al. disclose the claimed invention, as discussed for Claim 41, but do not expressly disclose that the package has specific dimensions. However, Narawa et al. do disclose compressing a diaper so as to reduce its thickness and to be compact for carrying convenience. The ability to carry/transport the package within various desired locations depends on the dimensions of the package itself; thus, the package dimensions are considered to be a result effective variable.

Thus, it would have been obvious to one of ordinary skill in the art to provide the package with specific dimensions, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In regard to Claim 75, as discussed previously, the encasement is gas impermeable and is therefore to be inherently moisture impermeable (especially since "moisture" would include gas vapor).

5. Claims 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narawa et al. in view of Clark (WO 0164156).

In regard to Claims 56-57, as discussed previously, Narawa et al. disclose the claimed invention but do not disclose that the packaged diaper has a substantially cylindrical shape. Clark teaches a diaper kit comprising a diaper 1, a diaper accessory 2, and a

Art Unit: 3761

container (shrink wrap) in which the diaper and diaper accessory are disposed (Figs. 1-3; page 2, line 20- page 3, line 10). The diaper is rolled and the packaged diaper is substantially cylindrical (Figure 3). Clark further teaches that the packaged diaper allows for ease of use and transportation of a diaper in combination with moistened wipes in a compact configuration (page 2, line 20- page 3, line 10). One would have been motivated to modify the article of Narawa et al. to provide for an article having a substantially cylindrical shape, as taught by Clark, since doing so would allow for an additional packaging configuration that provides increased convenience and ease of transportation to the user. Thus, it would have been obvious to one of ordinary skill in the art to modify Narawa et al. in order to provide for a packaged diaper having a substantially cylindrical shape, as taught by Clark, since doing so would allow for an additional packaging configuration that provides increased convenience and ease of transportation to the user.

6. Claim 76 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuske et al. (US 6,318,555).

In regard to Claims 76, Narawa et al. disclose the claimed invention but do not expressly disclose that the diaper comprises printed graphics that are viewable through the encasement. Kuske et al. teach providing a diaper with graphics to serve as visual indicators for the article or as enhancements to appeal to the consumer and further disclose packaging the diaper so that the diaper graphics are visible through the encasement (whole document, especially abstract, column 2, lines 57-column 3, line3;

Art Unit: 3761

column 3, line 47-column 4, line 15). One would have been motivated to modify the article of Narawa to provide the diaper with a graphic and further package the article so that the graphic is viewable through the encasement, as taught by Kuske et al., since doing so would provide various visual cues to the consumer. Thus, it would have been obvious to modify the article of Narawa to provide the diaper with a graphic and further package the article so that the graphic is viewable through the encasement, as taught by Kuske et al., since doing so would provide various visual cues to the consumer.

Response to Amendment

7. The amendment to Claim 10 is considered to overcome its rejection over 35 USC 112, second paragraph and is withdrawn.
8. The declaration from Alan Snell filed on 6/28/05 under 37 CFR 1.131 is sufficient to overcome the Kellenberger et al. (US 2004/0167489 A1) reference.
9. The declaration under 37 CFR 1.132 associated with the drawings and figures of related provisional 60/451,433 and filed 6/28/05 is sufficient to overcome the objection to the specification as introducing new matter. The materials provided are considered effective in showing that support for the vacuum-packing process is present in the provisional application 60/451,433.

Art Unit: 3761

10. The declaration under 37 CFR 1.132 associated with English translation of Narawa et al. JP 10-95481 and filed 6/30/05 is acceptable as an English translation of Narawa, yet insufficient to overcome the rejection of claims 42-44, 47, 50-53, 55-64, 67, 70, 73-78, as presented above, based upon the rejection under 35 USC 102 and 35 USC 103 in view of Narawa et al. as set forth in the current Office action because: as discussed about, Narawa et al. is still considered to anticipate or render obvious the claimed invention. The translation itself appears accurate and has been given substantial weight.

11. The declaration under 37 CFR 1.132 from Richard Anderson filed 6/28/05 is insufficient to overcome the rejection of claims 42-44, 47, 50-53, 55-64, 67, 70, 73-78, as presented above, based upon the rejection under 35 USC 102 and 35 USC 103 in view of Narawa et al. as set forth in the current Office action because: Mr. Anderson states that it is of his opinion that the process of packaging taught by Narawa would not be considered "vacuum-packing" by those of ordinary skill in the art. However, a search of the art teaches and fairly suggested that one of ordinary skill in the art would indeed consider the process of removing air for a gas-impermeable package through suction, then hermetically sealing the package, as taught by Narawa et al., to be a vacuum-packing process. Support for such arguments can be gained from the disclosures of US 4928829, US RE34929, US 20030102245, and 20050011166). The declaration also stated the packaging of Narawa et al. is made from polyethylene, which is not gas impermeable. However, polyethylene, as well as materials cited by Narawa for use as

Art Unit: 3761

the encasement, is a gas impermeable material—as supported by US 5,891,125, US RE35276, US 2003/0223652, and US 5,891,125. For these reasons, the declaration of Anderson is considered ineffective.

Response to Arguments

12. Applicant's arguments filed 6/28/05 have been fully considered but they are not persuasive.

As stated by applicant in Applicant's Remarks/Arguments filed 6/28/05, in an interview on 5/23/05, the Examiner presented Japanese Reference 10-95481, which had been cited on applicant's IDS, and asked to comment on the disclosure. In a subsequent interview (on 6/6/05) regarding continuing application 10/906,947, it was agreed that the claimed invention defined over Narawa et al. (JP 10-95481).

However, such agreement was based on the following assertions by the applicant:

- A. Narawa does not teach a gas impermeable encasement.
- B. Narawa does not teach an airtight seal.
- C. Narawa does not teach a partial vacuum.

After reviewing the translation of Narawa et al. and further reviewing the state of the art, the Examiner believes that the applicant's assertions are erroneous and that Narawa et al. does indeed anticipate the claimed invention.

In regard to assertion A, Narawa teaches a package comprising polyethylene, which applicant stated was not air impermeable. However, polyethylene is known to be

Art Unit: 3761

gas impermeable, as supported by US 5,891,125, US RE35276, US 2003/0223652, and US 5,891,125). Narawa also discloses that the film from which the bag is made, may be polypropylene, nylon, vinyl chloride, and plastic film ([0014]), which are also gas impermeable. Furthermore, the bag of Narawa can be considered to inherently be impermeable. Otherwise, Narawa's goal of removing air from the bag to reduce the amount of the air in the bag could not be achieved if the bag is capable of recovering the air volume that had been removed even after the bag has been sealed. Also, there would be little purpose to provide the bag with hermetic (airtight) seal after removing air from the bag if the bag is only going to regain the removed air volume-- as would be the case with an impermeable material, also implied by the applicant.

In regard to assertion B Narawa et al. expressly disclose that the product comprises an airtight seal ([0033], [0041], also see abstract "hermetically sealed"). Applicant has also argued that Narawa et al. teaches multiple types of seals for the bag. Regardless of the number of types of seals disclosed, an airtight seal is among those disclosed and therefore anticipates an airtight seal. (Also see MPEP 2123).

In regard to assertion #3, Applicant has argued that the bag of Narawa maintains the diaper in a compressed state, as opposed to being maintained by a differential pressure; and further that Narawa et al. discloses that this compressed state is done "with no additional pressure (emphasis added)." However, because air is removed from the bag, then closed with an airtight seal, a pressure differential is created within the bag.

Narawa et al. wish to maintain the diaper within a certain thickness ratio of the diaper [0015, 0019]. As such, the teaching of "at no additional pressure" is believed only to note that no additional pressure beyond that which is needed to maintain the diaper at the desired thickness ratio need be applied to the packaged system. (Also see Narawa [0035]). The fact that Narawa teach that the bag and its contents are to be subjected no *additional* pressure than what has already been produced/applied does not mean that no differential pressure exists at all.

Despite applicant's arguments, Narawa is still considered to anticipate and/or render obvious the structural limitations set forth in Claims 42-44, 47, 50-53, 55-64, 67, 70, 73-78 of the claimed invention, as presented earlier in the current Office Action.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Curley (US 20010045372), English translation of Kaneda (JP 4339724) and FoodSaver Quick Tip from March 2004 (and related documents) access via the Internet on 8/15/2005.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keshia Gibson whose telephone number is (571) 272-7136. The examiner can normally be reached on M-F 8:30 a.m. - 6 p.m., out every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3761

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Keshia Gibson
Examiner
Art Unit 3761

klg 9/14/05


TATYANA ZALUKAEVA
PRIMARY EXAMINER